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MICROSOFT CORPORATION  
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EXAMINER
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IWARERE, OLUSEYE

ART UNIT	PAPER NUMBER
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3687

NOTIFICATION DATE	DELIVERY MODE
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12/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/823,145	<b>Applicant(s)</b> STROMQUIST, PETER J.	
	<b>Examiner</b> OLUSEYE IWARERE	<b>Art Unit</b> 3687	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 05 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This communication is in response to the communication sent on October 5, 2009. The amendments and remarks have been fully considered below.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 – 5, 8 and 14 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over MaGuire (2004/0059651) in view of Gorelik (2001/0047372).**

**As per claims 1 and 14,** MaGuire discloses a method of configuring an Extraction, Transformation and Loading (ETL) package for loading source data elements from a financial table of a financial data store into a reporter table having pre-defined format, the method comprising:

- providing a computer including a processor (fig. 3 depicts providing a processor);
- providing a tangible computer-readable medium (fig. 3 depicts a tangible computer readable medium);
- forming one or more association objects, each of which are instantiations of the association class and identify one or more source columns of the financial table that are

associated with a destination column of the reporter table ([0021] and fig. 1 depicts forming association objects);

forming a transformation object, which is an instantiation of the transformation class and defines defining a transformation of source data elements of at least one of the source columns from a source format into a reporter format of the associated destination column identified by the association object (fig. 1 and [0022] depict forming a transformation object via the conversion engine); and

generating instructions for configuring an ETL package to extract the source data elements of the source column, transform the source data elements into the reporter format in accordance with the transformation object, and load the transformed source data elements into the associated destination columns of the reporter data table in accordance with the association objects (fig. 1 and [0022] depict generating instructions via the rules database).

However, MaGuire discloses a conversion engine and fails to explicitly disclose providing an Extraction, Transformation and Loading (ETL) designer module stored on the tangible computer readable medium, the ETL designer module

a destination column class defining destination column objects each identifying a destination column of the reporter table;

an association class defining association objects each identifying an association of at least one source column of the financial table with a destination column identified by a corresponding destination column object; and

a transformation class defining transformation objects each responsible for a transformation of the source data elements of the source column into a reporter format of the associated destination column as identified by a corresponding association object;

executing the ETL designer module using the processor; and  
generating instructions for configuring an ETL package, responsive to executing the ETL designer module .

Gorelik teaches a nested relational data model, with the features of providing an Extraction, Transformation and Loading (ETL) designer module stored on the tangible computer readable medium, the ETL designer module comprising:

a destination column class defining destination column objects each identifying a destination column of the reporter table (fig. 6 depicts defining destination);

an association class defining association objects each identifying an association of at least one source column of the financial table with a destination column identified by a corresponding destination column object (fig. 6 depicts defining association); and

a transformation class defining transformation objects each responsible for a transformation of the source data elements of the source column into a reporter format of the associated destination column as identified by a corresponding association object (fig. 6 depicts transformation);

executing the ETL designer module using the processor (fig. 6 depicts executing an ETL designer module); and

generating instructions for configuring an ETL package, responsive to executing the ETL designer module (fig. 6 depicts instructions for configuring).

From this teaching of Gorelik, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of MaGuire to include the ETL system taught by Gorelik, in order to provide means for relation of data.

**As per claims 2 and 15**, MaGuire discloses, wherein the transformation includes substituting at least a portion of the source data elements with a predefined substitution element ([0036] and fig. 2C disclose substituting).

**As per claims 3 and 16**, MaGuire discloses, wherein the transformation includes parsing the source data elements (fig. 2C and [0033] disclose parsing the elements).

**As per claims 4, 5, 8, 17 and 18**, MaGuire discloses the claimed invention but fails to explicitly disclose wherein the transformation includes concatenating the source data elements of two or more source columns, wherein the transformation includes pivoting the source data elements of the source column and including an ETL generator method configured to programmatically communicate with an ETL services module of a server to configure an ETL package based on the destination, association, and transformation objects.

Gorelik teaches a nested relational data model wherein the transformation includes concatenating the source data elements of two or more source columns ([0122] discusses concatenating);

wherein the transformation includes pivoting the source data elements of the source column ([0160] discusses pivoting); and

including an ETL generator method configured to programmatically communicate with an ETL services module of a server to configure an ETL package based on the destination, association, and transformation objects ([0006] discloses an ETL system).

From this teaching of Gorelik, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system and method of MaGuire to include the concatenating, pivoting and ETL system taught by Gorelik, in order to further provide means for relation of data.

**As per claim 19**, MaGuire discloses wherein forming one or more association objects includes receiving a user input defining the association of one or more source columns with a predefined destination column ([0039] discusses user definition).

**As per claim 20**, MaGuire discloses wherein forming a transformation object includes receiving a user input selecting the transformation ([0022] discusses selecting).

**As per claim 21**, MaGuire discloses including a step of validating that an association object has been completed for each destination column of the reporter table

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prior to generating instructions for configuring an ETL package ([0031] discusses validation and completing).

**4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over MaGuire (2004/0059651) and Gorelik (2001/0047372) in view of Pape (US 20080030348 A1).**

**As per claims 6 and 7**, MaGuire and Gorelik disclose the claimed invention but fail to explicitly disclose, wherein the transformation and association objects are each siblings of one of the destination column objects and wherein the destination column objects are siblings of a destination table object defined by a destination table class.

However, Pape teaches a method and system for agricultural data collection and management with the features of wherein the transformation and association objects are each siblings of one of the destination column objects ([0217] discusses sibling relationships to events); and

wherein the destination column objects are siblings of a destination table object defined by a destination table class ([0217] discusses sibling relationships to events).

From this teaching of Pape, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of MaGuire and Gorelik to include the above features taught by Pape, in order to provide data collection and management.



***Response to Arguments***

5. Applicant's arguments filed October 5, 2009 have been fully considered but they are not persuasive.

In rejecting independent claims 1 and 14, the Examiner found Gorelik to disclose an ETL designer module. In particular, the Examiner found the destination column class and association class of the ETL designer module described in claims 1 and 14 to read on the "XFRORM RULES (Declarative Rules)" 210 of FIG. 6B. There is no support for this finding. In particular, Gorelik fails to disclose that the rules 210 include "a destination column class defining destination column objects each identifying a destination column of the reporter table" or "an association class defining association objects each identifying an association of at least one source column of the financial table with a destination column identified by a corresponding destination column object," as recited in independent claims 1 and 14. In fact, Applicant was not able to locate any discussion of the rules 210 in Gorelik. Thus, there is no support for the Examiner's finding.

However, the abstract discloses, "The system can specify and execute declarative rules to extract, transform, integrate, load and update hierarchical and relational data." In combination the illustration in fig. 6B depicts these rules mentioned in the abstract. Therefore, the defining destination column objects and defining association objects is understood to be broadly met by the image, therefore the Examiner respectfully disagrees.

Applicant also disagrees with the Examiner's finding that the transformation engine 114 (FIG. 6A) of Gorelik discloses "a transformation class defining transformation objects each responsible for a transformation of the source data elements of the source column into a reporter format of the associated destination column as identified by a corresponding association object," as provided in claims 1 and 14. In particular, the cited transformation engine 114 is not described by Gorelik as defining the particular transformation objects recited in claims 1 and 14. Thus, there is no support for the Examiner's finding.

However, the transformation engine 114 is defined as performing transformations in [0042] and in combination with MaGuire, the elements in the claim are understood to be broadly met by the references in combination. Therefore, the Examiner respectfully disagrees.

Applicant also disagrees with the Examiner's finding that FIG. 6 of Gorelik, "depicts instructions for configuring" and discloses "generating instructions for configuring an ETL package, responsive to executing the ETL designer module," as provided in claim 14. In particular, Applicant cannot discern where in FIG. 6 the recited method step is disclosed. There does not appear to be any support for the Examiner's finding. As discussed previously, Gorelik fails to disclose any manner in which the ETL packages are formed in the ETL system mentioned in paragraph [0006] of Gorelik. While the Examiner found that MaGuire fails to disclose an extraction, transformation

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and loading (ETL) designer module, the Examiner still found FIG. 1 and paragraph [0022] of MaGuire to disclose "generating instructions for configuring an ETL package to extract the source data elements of the source column, transform the source data elements into the reporter format in accordance with the transformation object, and load the transform source data elements into the associated destination columns of the reporter table in accordance with the association objects," as provided in claim 14. These findings by the Examiner clearly conflict. As stated previously, Gorelik also fails to disclose the manner in which an ETL package is configured.

However, in order to clarify, while the instructions are believed to be included in the MaGuire reference, as stated in the rejection, MaGuire fails to explicitly disclose an ETL designer module. The Gorelik reference was brought in to explicitly disclose the ETL designer module. The term "ETL" should have been removed from the 4th paragraph of page 3.

Accordingly, the cited references do not disclose "an ETL designer module stored on the tangible computer-readable medium, executable by the processor, and designed to configure the ETL package," as provided in claim 1, or "generating instructions for configuring an ETL package, responsive to executing the ETL designer module," as provided in claim 14. Therefore, the references, taken either alone or in combination, fail to disclose the system of claim 1 or the method of claim 14. Accordingly, claims 1 and 14 are non-obvious in view of the cited references.

However, paragraph [0006] explicitly mentions an ETL system, therefore the Examiner respectfully disagrees.

Applicant has previously requested that the Examiner specifically identify each element recited in the claims. However, the Examiner has not identified where the cited references disclose "an ETL package," "source data elements," "a financial table," "a financial data store," "a reporter table," "destination column objects," "destination column," "association objects," "source column," and "transformation objects," as provided in claims 1 and 14. While the Examiner cites elements, such as roles 210 or transformation engine 114 of Goretik as disclosing some of these elements, the Examiner has failed to provide any support for the contention. Applicant has reviewed the cited references and the disclosure pertaining to the cited elements, and cannot discern any support for the Examiner's finding. Accordingly, Applicant must again request that the Examiner specifically identify the elements of the cited references corresponding to the elements of the claims. Further, in the event that a cited reference does not explicitly disclose a claimed element, Applicant requests that the Examiner provide a detailed explanation supporting the finding.

"an ETL package," – Gorelik [0006] explicitly discloses ETL systems

"source data elements," – MaGuire [0051] depicts source elements

"a financial table," – MaGuire fig. 2B depicts a financial table

"a financial data store," – MaGuire fig. 2B depicts a financial data store

"a reporter table," – MaGuire fig. 2B depicts a reporter table

"destination column objects," – Gorelik fig. 4

"destination column," – Gorelik fig. 4

"association objects," – Gorelik fig. 4

"source column," – Gorelik fig. 4

"transformation objects," Gorelik abstract discusses transformational data

However, the Examiner contends that there are multiple possible parts of the prior art that discloses some of the above elements. Therefore, the Examiner respectfully disagrees.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUSEYE IWARERE whose telephone number is (571)270-5112. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Gart can be reached on (571)272-3955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S Gart/  
Supervisory Patent Examiner, Art  
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OI